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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,173	02/28/2002	Ulrich Adams	32860-000203/US	9536
30596	7590	04/05/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O.BOX 8910 RESTON, VA 20195			SEFI, BEHROOZ M	
			ART UNIT	PAPER NUMBER
			2621	

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/980,173	ADAMS, ULRICH	
	Examiner	Art Unit	
	Behrooz Senfi	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-10,12-14 and 16 is/are pending in the application.
- 4a) Of the above claim(s) 1-7,11,15,17 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-10,12-14 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/13/2006 has been entered.

Response to Amendment/Arguments

2. Applicant's arguments filed on 1/13/2006 have been considered but are moot in view of the new ground(s) of rejection.
3. The amendment of 1/13/2006 cancels claims 1 – 7, 11, 15, 17 – 18 and amends independent claims 8 and 14.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8 – 10, 12 – 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tolino et al (US 4,654,702) in view of Qureshi et al (US 5,956,077).

Regarding claim 8, Tolino '702 teaches a remote controlled inspection device (fig. 1:30) for an annular combustion chamber of a gas turbine (i.e. steam vessel, col. 3,

line 18, Note: steam qualifies as a gas) including an inner internal wall portion and an outer inner wall portion (fig. 2 shows an inner/outer portions of wall 15a) comprising:

a remotely steerable drive mechanism (30) and a movable video camera (110) and a lighting arrangement (col. 7, lines 36 – 39) and carrying framework for the video camera, for the drive mechanism and for the lighting arrangement, including lower frame and an upper frame restable upon the inner internal wall portion and outer internal wall portion of the annular chamber (i.e. the carriage itself 30), and a plurality of wheels being mounted on both frames for moving the carrying framework in the peripheral direction of the annular combustion chamber along the inner internal wall portion and outer internal wall portion (figs. 2, 4, wheels 33 – 36 and 95), and means for transmitting video images from the video camera to an evaluation arrangement (the images are being transmitted to control unit 21, which includes a video monitor, col. 7, lines 34 – 35).

Tolino '702 teaches, using cameras 110, which is attached to the mast assembly 60, for inspection purpose. But is silent in regards to, a translational rail on one end of the inspection device, wherein video camera and lighting arrangement are mounted on the translational rail so as to be movable in transitional motion.

However, such features are well known and used in remote visual inspection as evidenced in Qureshi '077 (figs. 4 and 8), which shows a remote visual inspection device, including rotatable camera 48 (col. 1, lines 65 – 66) and lightening 49 and 50 are mounted on the transitional rail (39, i.e., gimbal support or carrier) that enabled more precise remote visual inspection of the internal surfaces.

In view of the above, taking the combined teaching of Tolino '702 and Qureshi '077 as a whole, it would have been obvious to one skilled in the art at the time of the invention was made to modify the mast assembly 60 of Tolino by using a transitional rail as taught by Qureshi for a more precise remote visual inspection of the internal surfaces.

Regarding claim 9, combination of Tolino '702 and Qureshi '077 teaches, the drive mechanism includes an electric motor and wheels (i.e. fig. 4, motor 51, col. 9, lines 28 – 30 of Tolino).

Regarding claim 10, combination of Tolino '702 and Qureshi '077 teaches, four wheels are mounted on the lower frame and an upper frame (i.e. fig. 2, wheels 95 and 36 of Tolino).

Regarding claim 12, the limitations claimed have been analyzed and rejected with respect to claim 8 above.

Regarding claim 14, the limitations claimed have been analyzed and rejected with respect to claim 8 above. Tolino '702 is silent in regards to, "telescopically" extendable C-shaped rail. However, Qureshi '077 (i.e. figs. 4 – 6, arms 31 – 35 of Qureshi) teaches a self supporting telescopically extendable flexible arms, which are adjustable to different shape and position, which enhances flexibility of the inspection device for inspecting of difficult access locations.

Therefore, taking the combined teaching of Tolino '702 and Qureshi '077 as a whole, it would have been obvious to one skilled in the art at the time of the invention was made to modify the mast assembly 60 of Tolino by using a self supporting

telescopically extendable flexible arms to enhance flexibility of the inspection device for inspecting of the inner surfaces of difficult access locations.

Regarding claims 16, combination of Tolino '702 and Qureshi '077 teaches, supporting C-shaped rail enables navigation of the combustion chamber without the need to contact the surface (i.e. fig. 4, arm 31 – 41, of Qureshi).

Contact

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(571) 272-7339**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mehrdad Dastouri** can be reached on **(571) 272-7418**.

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, Va. 22314.

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is **(571) 272-6000**,

Or faxed to:

(571) 273-8300

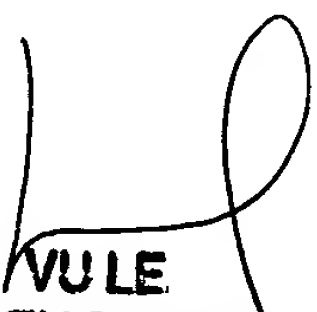
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B.M.S.

3/31/2006


VULE
PRIMARY EXAMINER